In the Claims:

Please cancel Claims 10, 11 and 27.

Kindly amend the claims as follows.

1. (Currently Amended) A treatment system comprising:

a first container comprising a first end and a second end opposite said first end, a first container wall disposed between said first end and said second end, said first end, said container wall and said second end defining a first interior and a first exterior, said first end, said container wall and said second end defining a first container opening;

a second container fluidly coupled to said first container, said second container comprising a first end and a second end opposite said first end, a second container wall disposed between said first end and said second end, said first end, said container wall and said second end defining a second interior and a second exterior, said first end, said container wall and said second end defining a second container opening;

a first aerator partially disposed in said first interior through said first container opening, said first aerator comprising a body having a first end and a second end opposite said first end, said body comprising an aerator wall disposed between said first end and said second end, said aerator wall including a plurality of perforations through said aerator wall, said first end, said second end and said aerator wall defining a first aerator interior and a first aerator exterior, said first aerator configured to partially rotatably dispose in a liquid contained in said interior of said first container, said first aerator configured to aerate said liquid both at said first aerator interior and said first aerator exterior, wherein said plurality of perforations formed in said first aerator wall are configured to lift a thin film of said liquid from said first container by exploiting the surface tension of said liquid, wherein said thin film bridges said plurality of perforations, and said first aerator is configured to create a cascading bubbling turbulent flow in said liquid flowing along said first aerator wall, as well as said liquid contained in said first container;

a second aerator partially disposed in said second interior through said second container opening, said second aerator comprising a body having a first end and a second end opposite said first end, said body comprising an aerator wall disposed between said first end and said second end, said aerator wall including a plurality of perforations through said aerator wall, said first end, said second end and said aerator wall defining a second aerator interior and a second aerator exterior, said second aerator configured to partially rotatably dispose in a liquid contained in said interior of said second container, said second aerator configured to aerate said liquid both at said second aerator interior and said second aerator exterior, wherein said plurality of perforations formed in said second aerator wall are configured to lift a thin film of said liquid from said second container by exploiting the surface tension of said liquid, wherein said thin film bridges said plurality of perforations, and said second aerator is configured to create a cascading bubbling turbulent flow in said liquid flowing along said second aerator wall, as well as said liquid contained in said second container; and

a rotary motive force element operatively coupled to said first aerator and said second aerator, said rotary motive force element configured to rotate said first aerator and said second aerator.

2. (Original) The treatment system of claim 1 further comprising:

at least one influent supply fluidly coupled to one of said first container and said second container;

at least one effluent discharge fluidly coupled to one of said first container and said second container.

3. (Original) The treatment system of claim 2 wherein said at least one influent supply is fluidly coupled to one of said first container and said second container at a predetermined depth of said first container and said second container, said at least one effluent discharge is fluidly coupled to one of said first container and said second container at a predetermined depth of said first container and said second container.

4. (Original) The treatment system of claim 1 wherein said first aerator and said second aerator are substantially cylinders configured for rotary motion about a longitudinal axis formed along said cylinder from said first ends of said first and second aerators to said second ends of said first and second aerators.

5. (Original) The treatment system of claim 1 wherein said first container and said second container are substantially semi-cylinders configured for containing liquid in said first interior and said second interior along a longitudinal axis of said semi-cylinders.

6. (Original) The treatment system of claim 1 wherein said liquid comprises one of an acidic metal-laden water and an alkaline metal-laden water.

7. (Original) The treatment system of claim 1 wherein said plurality of perforations comprises about one-half inch diameter holes defined in said aerator wall.

8. (Original) The treatment system of claim 1 wherein said first aerator and said second aerator are configured to rotate through said liquid and lift said liquid on an interior surface and an exterior surface of said first aerator wall and said second aerator wall.

9. (Original) The treatment system of claim 1 wherein said plurality of perforations of said first aerator are configured to fluidly couple said first aerator interior with said first aerator exterior wetting an exterior surface and an interior surface of said first aerator wall with said liquid, and wherein said plurality of perforations of said second aerator are configured to fluidly couple said second aerator interior with said second aerator exterior wetting an exterior surface and an interior surface of said second aerator wall with said liquid.

10. (Canceled) The treatment system of claim 1 wherein said plurality of perforations formed in said first aerator wall are configured to lift said liquid from said first container, and said plurality of perforations formed in said second aerator wall are configured to lift said liquid from said second container.

11. (Canceled) The treatment system of claim 1 wherein said first aerator wall is configured to create a cascading bubbling turbulent flow in said liquid flowing along said first aerator wall, as well as said liquid contained in said first container and said second aerator wall is configured to create a cascading bubbling turbulent flow in said liquid flowing along said second aerator wall as well as said liquid contained in said second container.

12. (Original) The treatment system of claim 1 wherein said first aerator and said second aerator are configured to increase dissolved oxygen content of the liquid contained in said first container and said second container respectively.

13. (Original) The treatment system of claim 1 wherein said first aerator is configured to mix reduced liquid and oxygen rich liquid in said first container, wherein the mixture of said reduced liquid with the oxygen rich liquid increases dissolved oxygen content of said liquid contained in said first container and said second aerator is configured to mix reduced liquid and oxygen rich liquid in said second container, and wherein the mixture of said reduced liquid with the oxygen rich liquid increases dissolved oxygen content of said liquid contained in said second container.

14. (Original) The treatment system of claim 1 wherein said first container and said second container are configured to promote flow of said liquid through said first container to said second container.

15. (Original) The treatment system of claim 1 wherein said first aerator and said second aerator are configured to expose said liquid to air.

16. (Original) The treatment system of claim 1 wherein said first aerator is configured to immerse into said liquid contained in said first container a predetermined minimal depth, and said second aerator is configured to immerse into said liquid contained in said second container a predetermined minimal depth.

17. (Original) The treatment system of claim 1 wherein said first aerator is configured to agitate reagents in said liquid contained in said first container, and said second aerator is configured to agitate reagents in said liquid contained in said second container.

18. (Original) The treatment system of claim 1 wherein said first aerator is configured to increase the ionic exchange during precipitation of heavy metals in said liquid and said second aerator is configured to increase the ionic exchange during precipitation of heavy metals in said liquid.

19. (Original) The treatment system of claim 18 wherein said first and second aerators are configured to agitate and lift coated un-reacted reagent particles in said liquid and liberate said un-reacted reagent thereby increasing ionic exchange during metal precipitation.

20. (Original) The treatment system of claim 19 wherein said first and second aerators are configured to expose said reagent particles to air in a thin liquid film, wherein said precipitant is completely oxidized during precipitant formation.

21. (Original) The treatment system of claim 1 further comprising:

a pump fluidly coupled to one of said first container and said second container, said pump configured to circulate said liquid through said first container and said second container.

22. (Currently Amended) A rotary water treatment system comprising:

at least one open channel cell configured to contain a liquid;

a cylinder partially disposed in said open channel cell, said cylinder having a first end and a second end opposite said first end, and a cylinder wall coupled between said first end and said second end, said cylinder wall including a plurality of perforations formed in said cylinder wall, wherein said cylinder is configured to rotate through said liquid and lift a thin film of said liquid on an interior surface and an exterior surface of said cylinder wall by exploiting the surface tension of said liquid, wherein said thin film bridges said plurality of perforations, and said cylinder is configured to create a cascading bubbling turbulent flow in said liquid flowing along said cylinder wall, as well as said liquid contained in said at least one open channel cell;

a motive force element coupled to said cylinder configured to impart rotary motion to said cylinder;

at least one influent supply coupled to said at least one open cell;

at least one effluent discharge coupled to said at least one open cell; and

a pump fluidly coupled to said at least one influent supply.

23. (Original) The rotary water treatment system of claim 22 further comprising:

another open channel cell fluidly coupled to said at least one open channel cell;

another cylinder partially disposed in said another open channel cell, said another cylinder having a first end and a second end opposite said first end, and a cylinder wall coupled between said first end and said second end, said cylinder wall including a plurality of perforations formed in said cylinder wall.

24. (Original) The rotary water treatment system of claim 22, wherein said cylinder wall is configured to aerate said liquid on both an outer surface and an inner surface of said cylinder wall.

25. (Original) The rotary water treatment system of claim 22 wherein said cylinder is partially disposed in said liquid contained in said open channel cell, and more than half of said cylinder longitudinal cross section extending beyond said open channel cell.

26. (Original) The rotary water treatment system of claim 23 wherein said motive force element comprises a gear reduced motor coupled to said cylinder and said another cylinder configured to rotate about a long axis of said cylinder and said another cylinder.

27. (Canceled) The rotary water treatment system of claim 22 wherein said cylinder is configured to rotate through said liquid and lift said liquid on an interior surface and an exterior surface of said cylinder wall, and configured to create a cascading bubbling turbulent flow in said liquid flowing along said cylinder wall, as well as said liquid contained in said at least one open channel cell.

28. (Original) The rotary water treatment system of claim 22 wherein the rotary treatment system is configured to increase dissolved oxygen content of the liquid contained in said at least one open channel cell.

29. (Original) The rotary water treatment system of claim 22 wherein said cylinder is configured to mix reduced liquid and oxygen rich liquid in said at least one open channel cell, wherein the mixture of said reduced liquid with the oxygen rich liquid increases dissolved oxygen content of said liquid contained in said at least one open channel cell.

30. (Original) The rotary water treatment system of claim 22 wherein said liquid comprises one of an acidic metal-laden water and an alkaline metal-laden water.

31. (Withdrawn) A method of treating a liquid comprising:

flowing the liquid through an influent supply into at least one open channel cell;

rotating a cylinder through said liquid, said cylinder partially disposed in said at least one open channel cell, said cylinder comprising a first end and a second end opposite said first end and a perforated cylinder wall coupled between said first end and said second end, said first end, said perforated cylinder wall and said second end defining an interior and an exterior of said cylinder;

lifting said liquid from said at least one open channel cell onto said perforated cylinder wall at an interior surface and an exterior surface of said perforated cylinder wall;

exposing said liquid to air from said exterior of said cylinder and said interior of said cylinder; and

flowing a treated liquid out of said at least one open channel cell through an effluent discharge.

32. (Withdrawn) The method of claim 31 wherein said liquid is one of an acidic metal-laden water and an alkaline metal-laden water.

33. (Withdrawn) The method of claim 31 wherein flowing said liquid includes pumping said liquid through a pump.

34. (Withdrawn) The method of claim 31 wherein rotating said cylinder includes rotating said cylinder with a gear reduced motor and drive belt arrangement.

35. (Withdrawn) The method of claim 31 wherein said cylinder is partially disposed in said liquid, said partial disposure being less than half of the longitudinal cross-section of said cylinder.

36. (Withdrawn) The method of claim 31 wherein rotating said cylinder comprises rotating said cylinder on shafts proximate said first end and said second end.

37. (Withdrawn) The method of claim 31 further comprising:

creating a cascading bubbling turbulent flow in said liquid flowing along said cylinder wall, as well as said liquid contained in said at least one open channel cell.

38. (Withdrawn) The method of claim 31 further comprising:

mixing a reduced liquid and an oxygen rich liquid in said at least one open channel cell, wherein the mixture of said reduced liquid with the oxygen rich liquid increases dissolved oxygen content of said liquid contained in said at least one open channel cell.

39. (Withdrawn) The method of claim 31 further comprising:

increasing dissolved oxygen content of the liquid contained in said at least one open channel cell.

40. (Withdrawn) The method of claim 31 further comprising:

agitating reagents in said liquid contained in said at least one open channel cell.

41. (Withdrawn) The method of claim 31 further comprising:

increasing the ionic exchange during precipitation of heavy metals in said liquid.

42. (Withdrawn) The method of claim 31 further comprising:

agitating and lifting coated un-reacted reagent particles in said liquid and liberating said un-reacted reagent thereby increasing ionic exchange during metal precipitation.

43. (Withdrawn) The method of claim 31 further comprising:

exposing said reagent particles to air in a thin liquid film, wherein said precipitant is completely oxidized during precipitant formation.

44. (Withdrawn) The method of claim 31 further comprising:

removing from said liquid at least one of a volatile organic compound and a regular metal;

aerating a water having a low dissolved oxygen content; and

bio-remediating said liquid.